BCTS
BC Timber Sales

Road Reporting Task Team (RRTT)

As- Built Roads (ABR)

GENUS Manual Data Entry

User Guide

REVISED: JULY 5, 2005

VERSION 1.1

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GENUS User Guide

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ABR:
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Version 1.1
July 5, 2005

Document Change Control

Version	Date of Issue	Author(s)	Brief Description of Change
0.1	June 10, 2005	RRTT	Original document
1.1	July 5, 2005	RRTT	"Description" field is mandatory in spatial metadata (page 8 of 12)

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GENUS User Guide
ABR:
GENUS Manual Data Entry
Version 1.1
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Purpose
To provide guidance for manually entering as-built road (ABR) tabular data into Genus.

Intended Audience:
Engineering Specialists, Engineering Technicians, Field Operation Supervisors, Forest Technicians, any staff/contractors likely to be involved with the manual entry of tabular ABR data into Genus.

Prerequisite:
This user guide assumes that the reader has a basic knowledge of general Genus navigation and map window functionality. For more detailed instructions on how to navigate within Genus or to set up the map window in general there are a number of GENUS user guides available on the BCTS website.

Best Practice and Base Assumptions:

- For FSR's and RP's, spatial road data (design location) should be loaded and routed in the Genus roads layer and submitted to FTA.
- If ABR location differs from the original design, updated spatial road location should be loaded and routed in the Genus roads layer.
- For On-block roads, the road name should be assigned as defined by the local naming convention and the spatial road location should be loaded (and routed) in the Genus roads layer.
- For on-block roads, the associated block must exist in Genus and the spatial block information should be loaded into the Genus "Block" layer.

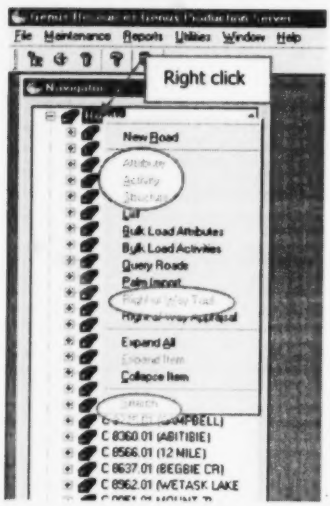
General Navigation Tips:

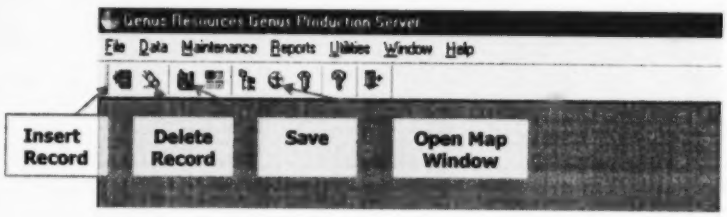
All data entry for ABR reporting is initiated thru the main road activities, attributes or structures screens. These screens are accessed by:

- Searching the navigator tree:
  - *Right click* on "Roads" at the top of the road navigator tree
  - Select "search"
  - Type road name or number as applicable to locate the road you are working with.
  - Select the road in the search dialogue box and click "Go To".
  - If you do not know the exact road name or number, expand the "Roads" by clicking on the + icon to the left of "Roads." A list of roads will be displayed on the navigator tree.

- When the road is located in the navigator tree, *right click* on the road and select "attributes" "activities" or "structures" to enter the applicable data. (specific data entry details are supplied in Steps 1 thru 4, below).
- All ABR tabs have been suffixed with "ABR" (ie: Linear Structures-ABR) for easy identification.
- Mandatory ABR data fields within each tab are colour coded pink. **NOTE:** in some cases the colour coding may not immediately appear upon opening a screen that has not been previously populated. To activate the colour coding, enter data in any field, save, exit the screen, re-enter the screen and the colour coding will appear for all mandatory fields.
- To delete unwanted road sections in any screen, highlight the section by clicking on it and then click the eraser button.
- Date fields can be populated by manually typing YY/MM/DD or by double-clicking in the date fields and selecting from the calendar.

General Navigation and Commonly Used Icons:





STEP 1 –VERIFYING RIGHT-OF-WAY DATA FOR FSR AND RP ROADS

(It is not necessary to populate the right-of-way data for on-block roads. If you are entering on-block road data, proceed directly to Step 2)

The Right of Way tool must be populated for all Forest Service roads or roads under road permit. This window can be accessed by *right clicking* "Roads" at the top of the roads module navigator tree and selecting "Right–of-Way Tool".

- Locate the RP or FSR number by clicking the "Permit ID" dropdown
- Under normal operating circumstances, the "Right of Way Tool" windows will have been populated at the time that the original permit application was submitted to FTA. However, it is possible for some roads to have been submitted to FTA without being entered in Genus. Therefore, it is recommended that the right of way data for all RP's and FSR's be verified prior to making ABR submissions.
- If the permit does not exist in the right of way tool, then the mandatory data will have to be entered prior to the ABR submission. There are two tabs in the Right ofway To ol that must be populated. The mandatory fields for each tab are summarised as follows:

Details Tab	Road Section Details Tab
Permit ID	Insert all road sections under permit
Amendment Number	For each section, populate Section ID
District	
Licensee	
Deemed Owner (checked)	
Permit Type	
Application Description	
Jurisdiction	
Management Unit Type	
Management Unit ID	
Amendment Type (if applicable)	

NOTE: It is important to ensure that the Permit ID road section ID's populated in the Right of Way Tool are identical to those that have been submitted to FTA. Failure to align these road section ID's will result in the ABR submission being rejected.

- Additional information relating to populating these mandatory fields is provided in the user guide relating to road permit submissions to FTA: "FTA Road Permit Application User Guide"
- Once the Right of Way windows are populated, the remaining ABR data fields can be entered.

STEP 2 – ENTERING ABR ATTRIBUTE DATA

- Access the attribute tabs by *right clicking* on the selected road in the navigator tree and select "Attribute". Four ABR attribute tabs are located on the bottom right hand side of the screen:
  - On Block Rds – ABR
  - Linear Struct – ABR
  - Organic Mat – ABR
  - Spatial Meta – ABR

- Upon opening any of the attribute tabs, it is necessary to click "insert record" to activate the screens.

a) On-Block Road Tab

If data field highlighting is not apparent, please refer to the Navigation Tips section of this document (above) for guidance.

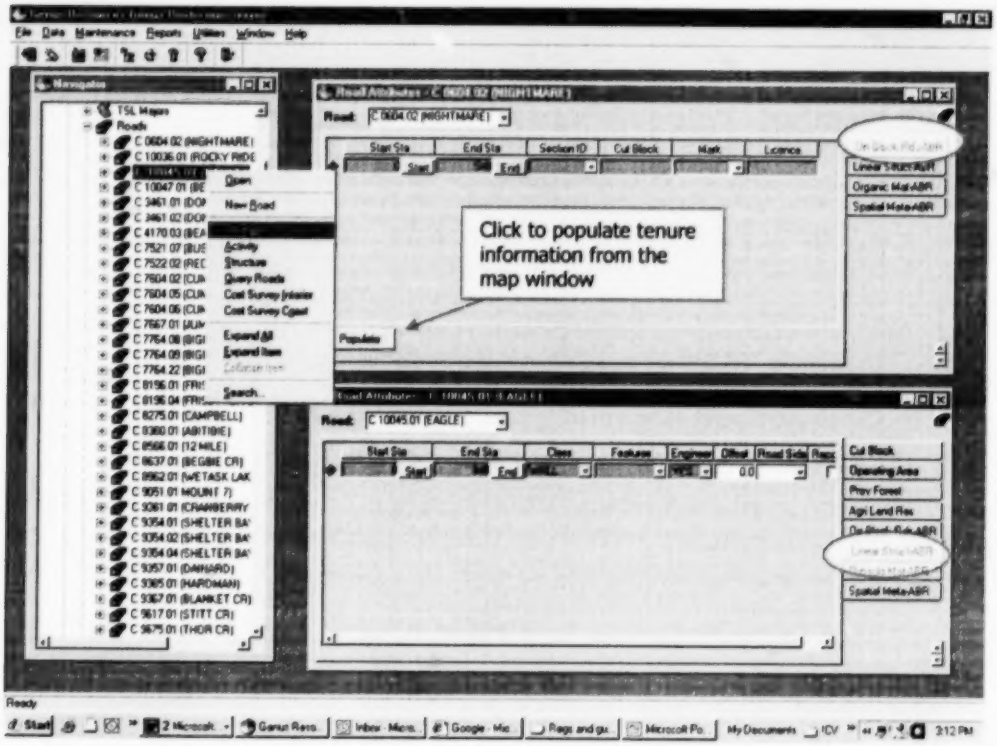
The on-block road tab must be populated for all on-block roads (ie: roads authorized under a TSL as opposed to an FSR or road permit). For On-block roads, it is *not* necessary to populate the right of way window outlined in Step 1, above. However, it *is* necessary to ensure that the block where the road is located has been loaded into the Genus block layer and linked to the appropriate Licence, Mark and Block in the navigator tree. If this step has not yet been completed, refer to the user guides: "Planning and Block Creation" and "TSL Assignment".

To enter On-block road attributes:

- Select the "on-block road" tab and click "insert record" to activate the screen
- Auto-populate the licence, block and mark information for on block roads by using the "populate" button in the lower left corner of the On Block Road screen. To set up this functionality:
  - Open the Map window (blue globe icon) and ensure it is set to "Road".
  - *Right click* in the map window and click "select layers"
  - Make the block and road layers for your TSO Active, Visible, and Selectable, click OK
  - Minimise the Map window
  - Return to the "On Block Road" data screen

- Click "populate" and the Licence, Timber Mark and block for the on-block road will be populated

- Manually enter the appropriate section ID for the road. It is recommended that TSO's establish a standardised, consistent method for labelling road sections . Section ID's must be unique within a licence. The On-Block Road screen *does not* allow for overlapping road sections.



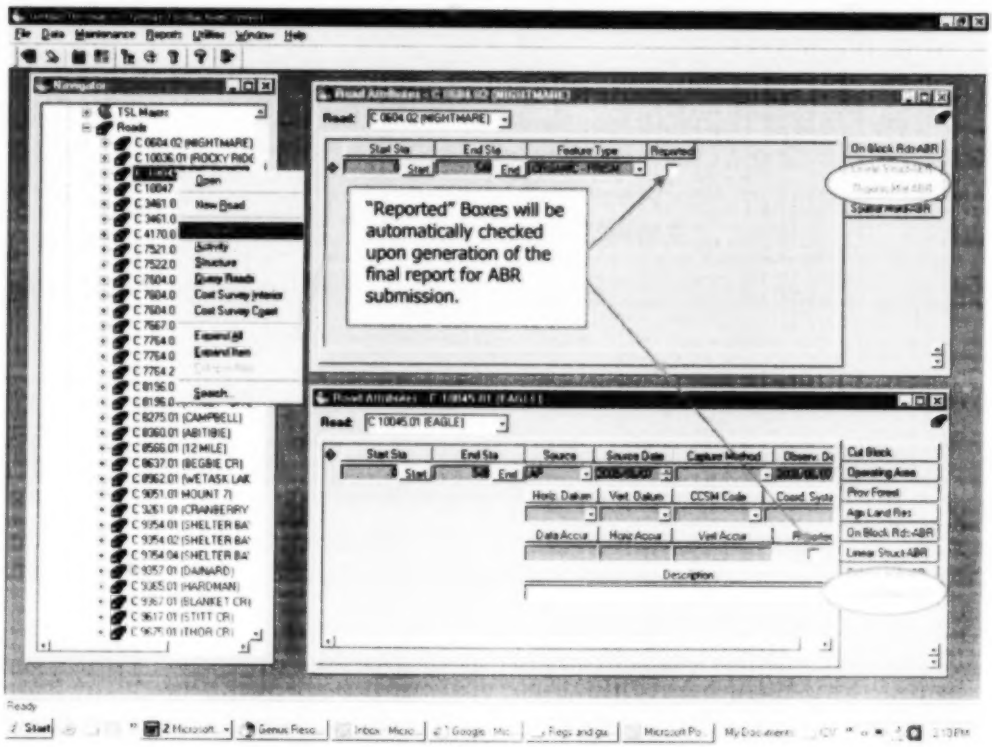
b) Linear Structures Tab

- Click the "linear structure" tab and click "insert record" to activate the screen
- If the road must be broken into shorter sections to properly capture all linear structures, insert additional records and enter appropriate start and end stations. This screen *does* allow for overlapping road sections. Sections can be added as follows:
    - Insert a new record below the first entry.
    - Type the start and end section for the new entry (ie: Section 1 = 0-850, Section 2 = 851-2000, etc)
- Using the dropdown menu, select appropriate "Class" and "Feature" for each section.

- All roads default to "engineered" "yes". If this is not the case then "N" can be entered.
- Enter an "offset" (distance (m) from centre line) if desired. (offset is non-mandatory for ABR reporting)
- Enter the road side of the offset (left or right) if desired
- **NOTE:** The "reported" box will be automatically checked once an xml has been created to make the ABR submission, it should *not* be manually checked at the time of data entry.

c) Organic Material Tab

- Open the organic material tab and click "Insert Record" to activate screen
- The road can be broken into shorter sections to accommodate different feature types along the road by inserting additional records however this data screen *does not* allow for overlapping road sections.
- Select appropriate feature type from the dropdown
- **NOTE:** The "reported" box will be automatically checked once an xml has been created to make the ABR submission, it should *not* be manually checked



d) Spatial Meta Data Window

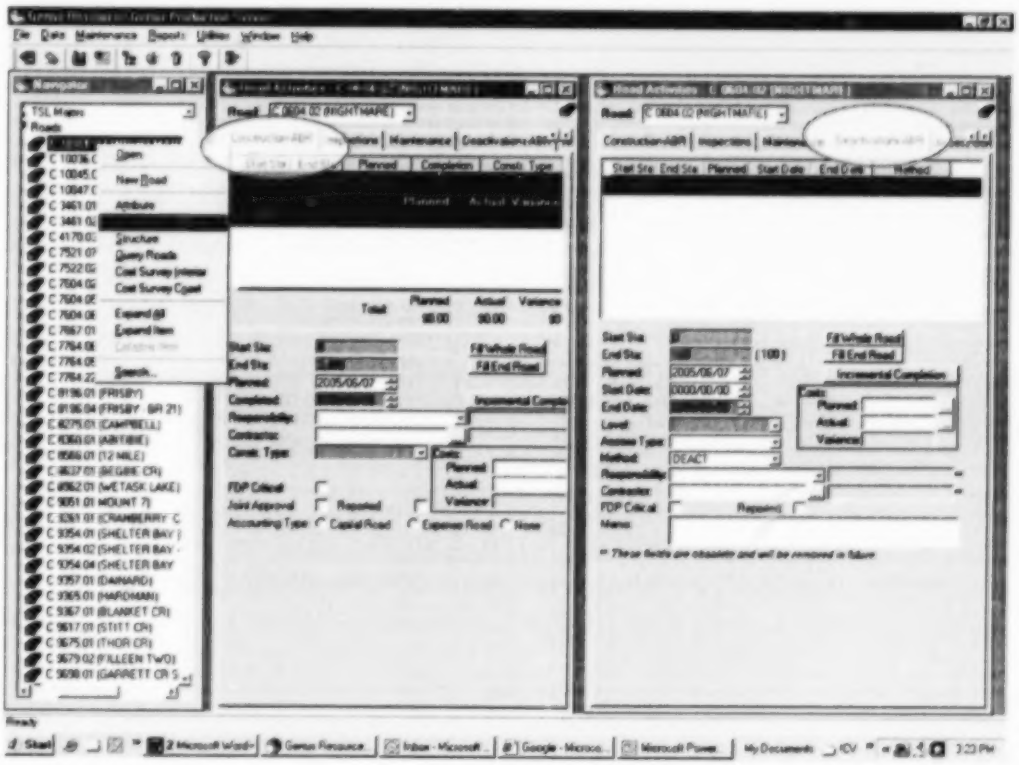
All roads reported to ABR must have spatial meta data. The data quality items below are *not* intended to represent data collection standards but should provide information on the actual capture methods and true quality of the spatial data that was collected.

- Open the spatial meta data window and click "insert record" to activate the screen.
- If the road must be broken into shorter sections to properly capture all spatial meta data, insert additional records and enter appropriate start and end stations. This screen *does not* allow for overlapping road sections.
- Select road data source information (ie: how was the road data collected)
- Enter Source Date, Capture Method and Observation date
- Select Horizontal Datum and Vertical Datum (**NOTE:** Vertical Datum should be set to CVD28 for two dimensional data.)
- CCSM Code is most commonly "Gravel Undivided"
- Select appropriate coordinate system
- Data Accuracy: is entered as a percentile (ie: 95)
- Horizontal Accuracy: is a distance entered in metres (ie: 10)
- Vertical Accuracy: is a distance entered in metres (**NOTE:** Vertical Accuracy should be set to "zero" for 2-dimensional data)
- The "Description" field must be populated to satisfy the business validation. In the absence of any other descriptive information enter "RP/FSR submission" or "On-block Road submission", whichever is the case. Double click in the "Description" field to open the dialogue box to enter the information.
- Close the road attribute window when complete.

STEP 3: ENTERING ABR ACTIVITY DATA

- Access the ABR activity tabs by *right clicking* on the selected road in the navigator tree and click "ACTIVITY"
- Select the applicable tab ("Construction - ABR" or "Deactivations – ABR")
- Click "Insert Record" to activate the data entry screens
- Enter start and end stations as required
- Insert additional sections as required to properly define where construction or deactivation has taken place along the length of the road
- Enter completion dates and construction types or, in the case of deactivation, enter the deactivation level and method.
- Save changes.

- As with other ABR screens the "reported" box will be auto-populated when the report and xml are created to complete the ABR submission.
- Close activity screen when complete.



STEP 4: ENTERING ABR STRUCTURE DATA

- Access the ABR structure tab by *right clicking* on the selected road in the navigator tree and click "STRUCTURE"
- Select the "General ABR" tab and choose the "Structure Type" from the dropdown in the top right hand corner of the screen. Click "insert record" to activate the data entry fields
- populate the structure specifics (ie: Culvert: Plastic), and the structure station number (ie: point location in meters from POC of the road).
- Bridges are entered as linear features (ie: require a "start" and "end" station to be identified.

- Populate the structure ID

> **NOTE:** If no structure ID is supplied, GENUS will prompt the user if it is acceptable to use the system generated "Sequence Number" as the Structure ID. It is highly recommended that the TSO's assign an operationally meaningful Structure ID rather than using the system generated number.

- For culverts, it is important to confirm that the culvert is in fact reportable (ie: a major culvert 2000mm diameter or greater, or a fish stream culvert) by checking the "Reportable" box. If this is not checked off, an ABR report for this structure can not be generated.
- Save all entries before exiting the "General ABR" screen.

- Click on "Details ABR" tab to enter the mandatory structure details.

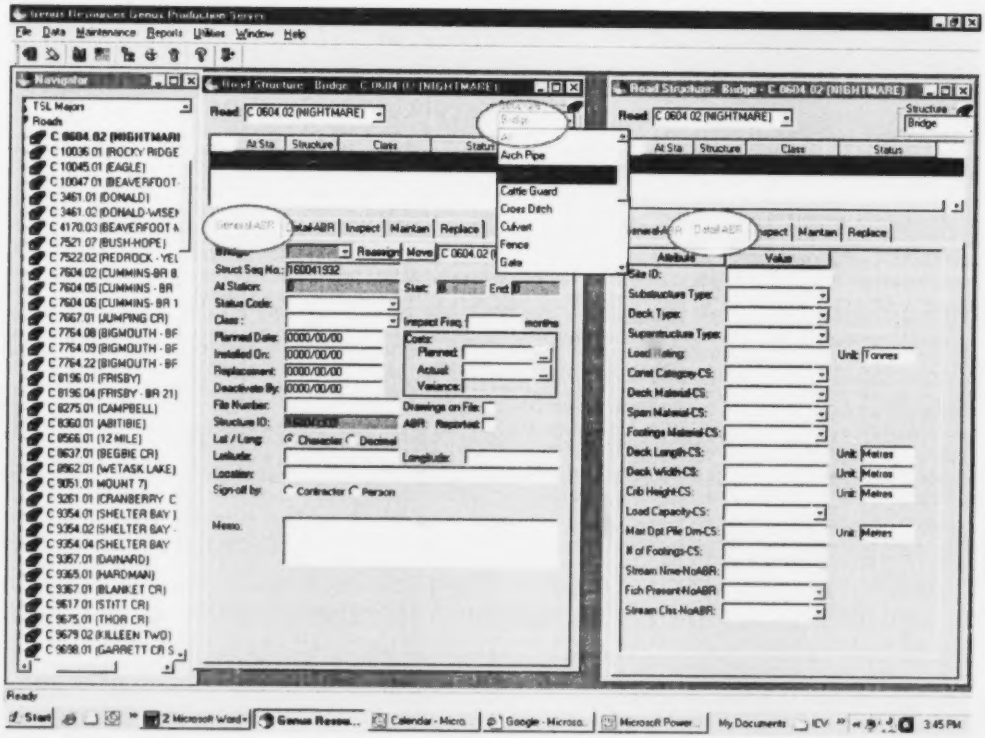
Mandatory ABR structure details include all fields in this screen *with the exception of those suffixed with "CS" (cost survey) or "Non-ABR"*

If the information is available, fields labelled "CS" can be entered at the same time as the ABR data entry. This information is not mandatory for ABR reporting, but will eventually be required to meet CS reporting obligations for FSR's where costs have been incurred after April 1, 2005. More information on data entry specific to Cost Survey is included in the user guide: "*Cost Survey: Genus Manual Data Entry*".

Fields labelled "Non-ABR" can be entered at the discretion of the TSO

- For mandatory fields, select from drop downs where available
- Site and Structure ID's are unique alpha-numeric identifiers supplied by the TSO.
- Load Ratings are measured in tonnes.

Road Structure Data Windows



Next Steps

Following completion of the ABR data entry, it will be necessary to complete the ABR submission through the Ministry of Forests Electronic Submission Framework (ESF). Guidance on how to complete the ESF submission is contained within the user guide: "*ABR: Submitting Information Through the Electronic Submission Framework (ESF)*".

Supporting Documentation

There is a variety of information under development that provides guidance on how to proceed with the gathering and loading of ABR data. This information is summarised as follows:

User Guides	~ ABR and Cost Survey: Identification of Reporting Population (June 1, 2005) ~ ABR: Mandatory Data Requirements (June 1, 2005) ~ ABR: Evaluating Existing Road Data (June 20,2005) ~ ABR: Road Data Clean-up (spatial) (June 20,2005) ~ ABR: Integrating GPS Data (spatial) (June 20, 2005) ~ ABR: Submitting Information Through the Electronic Submission Framework (ESF) (June 20, 2005) ~ Cost Survey: Data Entry Requirements (July, 2005)
Other Tools and Supporting Documents	~ ABR GPS Data Collection Specifications (June 1, 2005) ~ Data Dictionary for Data Logger (June1, 2005) ~ As-built Roads – ESF Submission Guide (May 16, 2005, Ministry of Forests) ~ Industry Guide to the Preparation and Submissions of As Built Road Submissions via ESF (December 2004, Ministry of Forests)

Please refer to the following website for copies of the documents identified above and for additional contact information.

http://gww.for.gov.bc.ca/bcts/wg/roadreport/